

**Kalamazoo River Study Group**  
**Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site**  
**Supplemental Remedial Investigations/Feasibility Studies**

**Table 1 -- Co-Located Soil and Non-Depurated Worm Total PCB Concentrations**  
**Data Collected by MSU for Fort Custer Reference Area and Former Trowbridge Impoundment**

Soil						Non-Depurated Fresh Worm Tissue				BAF	BSAF
Sample ID	Total PCB (mg/kg ww)	Percent Moisture	Total PCB (mg/kg dw)	Percent Organic Carbon	Total PCB (mg/kg OC dw)	Sample ID	Total PCB (mg/kg ww)	Percent Lipid	Total PCB (mg/kg lipid ww)	mg/kg ww tissue/mg/kg dw soil	mg/kg tissue lipid ww/mg/kg soil oc dw
<b>Fort Custer Grid 1</b>											
FCTI010101E	0.00024	10%	0.00026	0.89%	0.030	FCTI010101C	0.0033	1.8%	0.19	13	6.3
FCI010102D	0.0089	42%	0.015	7.2%	0.21	FCTI010102B	0.0043	2.2%	0.20	0.28	0.93
FCTI010103A <sup>1</sup>	0.0030	35%	0.0047	5.3%	0.088	FCTI010103D	0.0016	2.2%	0.073	0.34	0.83
FCTI010104A	0.0033	23%	0.0043	3.7%	0.12	FCTI010104C	0.0013	1.8%	0.070	0.30	0.61
<b>Fort Custer Grid 2</b>											
FCTI010201D	0.025	13%	0.028	2.2%	1.3	FCTI010201E	0.0022	1.6%	0.14	0.077	0.10
FCTI010202A <sup>2</sup>	0.0060	52%	0.012	12%	0.11	FCTI010202(B)*	0.0026	2.0%	0.13	0.21	1.2
FCTI010203A	0.0034	21%	0.0043	4.5%	0.10	FCTI010203E	0.0026	1.8%	0.14	0.61	1.5
FCTI010204A	0.0027	11%	0.0030	1.6%	0.19	FCTI010204C	0.0020	1.5%	0.13	0.67	0.71
<b>Trowbridge Grid 1</b>											
TBTI010101C	2.3	45%	4.2	8.2%	51	TBTI010101W	0.77	2.0%	39	0.18	0.77
TBTI010102C	2.7	29%	3.8	5.9%	64	TBTI010102D	0.38	3.7%	10	0.10	0.16
TBTI010103C	2.0	37%	3.1	6.4%	49	TBTI010103E(G)*	0.64	1.9%	34	0.20	0.70
<b>Trowbridge Grid 2</b>											
TBTI010201B	1.8	34%	2.7	5.7%	48	TBTI010201X	0.39	2.2%	18	0.14	0.38
TBTI010202A	7.6	23%	10	6.7%	146	TBTI010202C	2.2	1.7%	134	0.23	0.91
TBTI010203C	5.8	37%	9.2	6.2%	150	TBTI010203A(E)*	1.37	1.7%	79	0.15	0.53
TBTI010204C	2.1	41%	3.5	8.4%	42	TBTI010204B	1.2	1.4%	86	0.34	2.1
<b>Trowbridge Grid 3</b>											
TBTI010301C	4.1	45%	7.5	7.5%	100	TBTI010301A	4.7	2.7%	176	0.63	1.8
TBTI010302C	2.0	28%	2.7	6.5%	42	TBTI010302D	1.2	1.6%	73	0.42	1.8
TBTI010303F	1.8	31%	2.6	4.3%	61	TBTI010303B	1.1	2.0%	53	0.41	0.88
TBTI010304B	6.0	43%	10	4.0%	260	TBTI010304E	0.34	1.6%	22	0.032	0.084
<b>Trowbridge Grid 4</b>											
TBTI010401W	14	34%	21	4.1%	510	TBTI010401A	1.1	1.8%	61	0.052	0.12
TBTI010402A2	5.9	26%	7.9	3.4%	231	TBTI010402B2	5.1	2.6%	197	0.65	0.85
TBTI010403D	5.2	20%	6.5	3.2%	202	TBTI010403E	6.0	2.2%	277	0.93	1.4
TBTI010404F	7.5	36%	12	4.2%	280	TBTI010404E	1.5	1.8%	87	0.13	0.31

**Notes:**

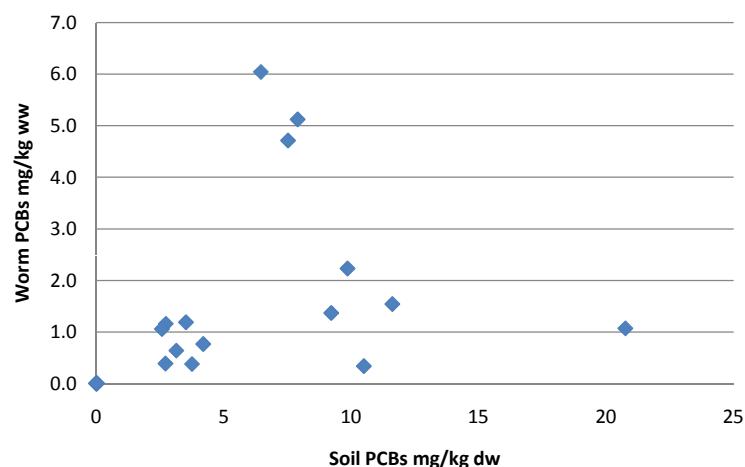
ww = wet weight; dw = dry weight; oc = organic carbon

\* sample result is an average of duplicate samples. ( ) is the last letter of the sample ID for the duplicate sample.

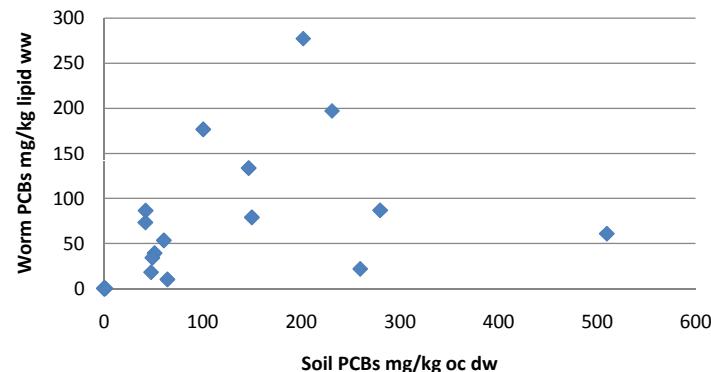
<sup>1</sup> database indicates this soil sample was co-located for plants - field notes verified that it was also co-located with the worm sample shown. (pers comm. Matt Zwiernik Oct 28, 2008).

<sup>2</sup> Sample coordinates in database recorded incorrectly. Field notes indicate that sample was co-located with worm samples shown. (pers comm. Matt Zwiernik Oct 28, 2008).

**Co-Located Dry Weight Soil vs Wet Weight Non-Depurated Worm TPCB**  
Ft. Custer and Trowbridge



**Co-Located Organic Carbon Normalized Soil vs Lipid Normalized Non-Depurated Worm TPCB**  
Ft. Custer and Trowbridge



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**Table 2 -- Co-Located Soil and Depurated Worm Total PCB Concentrations**  
**Data Collected by MSU for Fort Custer Reference Area and Former Trowbridge Impoundment**

Sample ID	Soil				Depurated Worm Tissue				BAF	BSAF	
	Total PCB (mg/kg ww)	Percent Moisture	Total PCB (mg/kg dw)	Percent Organic Carbon	Total PCB (mg/kg oc dw)	Sample ID	Total PCB (mg/kg ww)	Percent Lipid	Total PCB (mg/kg lipid ww)	mg/kg ww tissue/mg/kg dw soil	mg/kg tissue lipid ww/mg/kg soil oc dw
<b>Fort Custer Grid 1</b>											
FCTI010101E	0.00024	10%	0.00026	0.0089	0.030	FCTI010101D	0.0045	2.1%	0.22	17	7.4
FCTI010103A <sup>1</sup>	0.0030	35%	0.0047	0.053	0.088	FCTI010103E	0.0049	1.9%	0.26	1.1	2.9
FCTI010104A	0.0033	23%	0.0043	0.037	0.12	FCTI010104E	0.0051	1.9%	0.26	1.2	2.3
<b>Fort Custer Grid 1</b>											
FCTI010201D	0.025	13%	0.028	0.022	1.3	FCTI010201F	0.0053	1.6%	0.33	0.19	0.25
FCTI010202A <sup>2</sup>	0.0060	52%	0.012	0.12	0.11	FCTI010202C	0.015	1.5%	0.98	1.2	9.3
FCTI010203A	0.0034	21%	0.0043	0.045	0.10	FCTI010203F	0.0030	1.7%	0.18	0.70	1.9
FCTI010204A	0.0027	11%	0.0030	0.016	0.19	FCTI010204D	0.0048	1.8%	0.27	1.6	1.4
<b>Trowbridge Grid 1</b>											
TBTI010101C	2.3	45%	4.2	0.082	51	TBTI010101	0.43	2.2%	19	0.10	0.38
TBTI010102C	2.7	29%	3.8	0.059	64	TBTI010102E	0.21	1.9%	11	0.055	0.17
TBTI010103C	2.0	37%	3.1	0.064	49	TBTI010103F	3.5	2.0%	179	1.1	3.6
<b>Trowbridge Grid 2</b>											
TBTI010201B	1.8	34%	2.7	0.057	48	TBTI010201W	0.95	2.0%	47	0.35	0.98
TBTI010202A	7.6	23%	9.9	0.067	146	TBTI010202D	1.4	1.7%	83	0.15	0.57
TBTI010203C	5.8	37%	9.2	0.062	150	TBTI010203F	0.66	1.6%	40	0.071	0.27
TBTI010204C	2.1	41%	3.5	0.084	42	TBTI010204E	0.78	1.3%	60	0.22	1.4
<b>Trowbridge Grid 3</b>											
TBTI010302C(W)*	3.84	29%	5.4	0.062	87	TBTI010302E	0.50	2.0%	25	0.09	0.28
TBTI010303F	1.8	31%	2.6	0.043	61	TBTI010303C(G)*	0.57	1.9%	30	0.22	0.49
<b>Trowbridge Grid 4</b>											
TBTI010401W	14	34%	21	0.041	510	TBTI010401B	1.9	3.7%	51	0.089	0.099
TBTI010402A2	5.9	26%	7.9	0.034	231	TBTI010402C	3.4	4.9%	70	0.43	0.30
TBTI010403D	5.2	20%	6.5	0.032	202	TBTI010403F	8.9	2.5%	359	1.4	1.8
TBTI010404F	7.5	36%	12	0.042	280	TBTI010404A(B)*	1.40	1.6%	87	0.12	0.31

**Notes:**

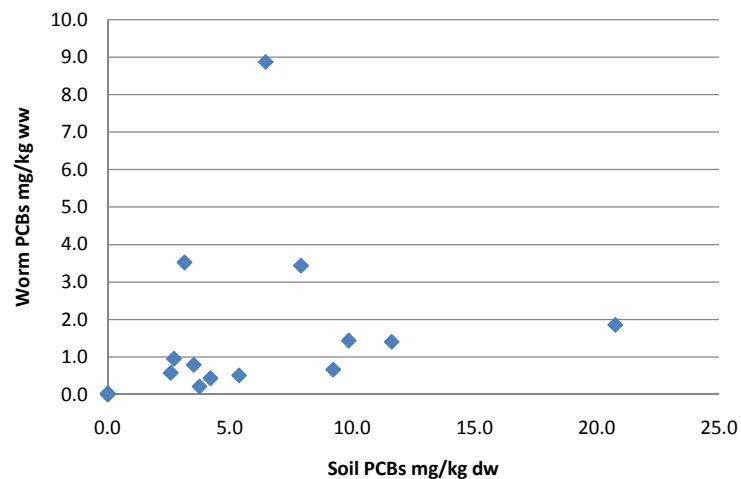
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